restraints, particularly exclusionary practices. Vertical restraints denote a company's actions that restrict its buyer or seller relationships with other companies. Exclusionary practices is a general pejorative label covering a host of competitive and contractual activities that are alleged to create barriers to competition and increase a company's market power.³⁶ The present discussion focuses on the local exchange carrier who is alleged to have the power to exclude suppliers of long distance services from all or part of its market.

Leverage is defined in antitrust as the use of monopoly power in one market to extract additional monopoly rents and to secure competitive advantages in a second market.³⁷ This is an example of an exclusionary practice since it is designed to exclude competitors from all or part of the market. The exclusion of competitors from the second market is referred to as "foreclosure." Leverage is asserted to be exercised in a variety of ways. These include tying, restricting access to essential facilities, and refusals to deal. The tying and essential facilities doctrines have often been applied in antitrust cases in telecommunications.³⁸ The leverage argument is generally flawed because the monopolist is able to extract monopoly rents in the market that it controls and cannot increase its rents by expansion into a second market.

³⁶ Richard A. Posner, Antitrust Law: An Economic Perspective (University of Chicago Press, 1976) at 28 defines an exclusionary practice as occurring when a firm "trades a part of its monopoly profits, at least temporarily, for a large market share, by making it unprofitable for other sellers to compete with it."

³⁷ The Second Circuit Court, in *Berkey Photo* 603 F. 2d 263, stated that "the use of monopoly power attained in one market to gain a competitive advantage in another is a violation of section 2 [of the Sherman Act], even if there has not been an attempt to monopolize the second market." This monopoly leverage argument has been rejected in *Air Passenger Computer Reservation Systems Antitrust Litigation*, 694 F. Supp. 1443, 1472 (C.D. Cal. 1988).

³⁸ Kellogg, Thorne, and Huber supra note 35 at 142.

A tying contract refers to a situation in which the seller of a good requires the buyer to purchase as second good, thus selling the two as a product bundle.³⁹ For example, a tying contract offered by an LEC would require the buyer of its local service to purchase its long-distance service as well. The company is then said to "leverage" its market power in the tying product market over to the market for the tied product. The courts are concerned with the restriction of competition in the tied product market. The reasoning behind the law and court decisions on tying has been subject to significant criticism.⁴⁰ As Judge Richard A. Posner has observed "One striking deficiency of the traditional, 'leverage' theory of tie-ins, as the courts have applied it, is the failure to require any proof that a monopoly of the tied product is even a remotely plausible consequence of the tie-in."⁴¹ The problem is that the monopolist has little incentive to do so since it generally obtains no additional profits from the tie-in sale and rarely obtains market power in the market for the tied good.⁴²

The firm may obtain benefits from tie-ins if the tied good allows metering of usage of the tying good for pricing purposes. However, as Posner observes, this does not imply that there is an incentive to exclude competition. In the telecommunications context, the LEC certainly is

³⁹ In *Times -Picayune Publishing Co. v. United States*, 345 U.S. 594 (1953) the Court held that tying violates the Sherman Act if the seller has both a monopoly in the tying product and if competitors are foreclosed in the tied product, while the Clayton Act applies if *either* of these conditions holds.

⁴⁰ Robert H. Bork, *The Antitrust Paradox* (Basic Books, 1978) at 366 calls the transfer of market power theory behind the antitrust law on tying, and the Supreme Court's enforcement of it, "fallacious." See also Ward S. Bowman, "Tying Arrangements and the Leverage Problem," 67, *Yale Law Journal* 19 (1957). George J. Stigler criticizes the application of the tying in "United States v. Loew's, Inc.: A Note on Block Booking," *Supreme Court Review*, 152 (1963).

⁴¹ Richard A. Posner, Antitrust Law: An Economic Perspective (Chicago University Press, 1976) at 172.

⁴² *Id.* at 173.

capable of monitoring usage of its local service without the sale of additional long distance services.

An essential facility refers to productive inputs that cannot be duplicated feasibly or economically by others.⁴³ The concept has been applied rather broadly in antitrust. It has elements of both natural monopoly and barriers to entry. As in the case of natural monopoly technology, the essential facility should not be duplicated since the market is served at least cost with one facility. The idea that a competitor cannot feasibly or economically duplicate a facility in a market suggests the presence of barriers to entry. Thus, the argument goes, an existing facility will not be duplicated because an entrant would incur irreversible investment costs. Alternatively, it is suggested that the costs of duplicating the facility are higher for an entrant than an incumbent.

The essential facility doctrine goes beyond the natural monopoly and barriers to entry ideas since it incorporates vertical elements. The owner of the essential facility not only has monopoly power in one market but is presumed to deny equitable access to competing firms in another market. In *United States v. Terminal Railroad Association*, the Court found a railroad switching junction to be an essential facility.⁴⁴ In Otter Tail Power Co. v. United States, the Court found that the electric power transmission lines of the utility were an essential facility.⁴⁵ The standard antitrust remedy for the essential facilities problem is to mandate equal access.⁴⁶

⁴³ See United States v. Terminal R.R. Ass'n, 224 U.S. 383 (1912); Otter Tail Power Co. v. United States, 410 U.S. 366 (1973).

⁴⁴ 224 U.S. 383 (1912);

⁴⁵ 410 U.S. 366 (1973)

⁴⁶ Kellogg et al, supra note 35, at 140.

The view that the local exchange is an essential facility is reflected in the MFJ's mandate of equal access for long distance carriers.

Even if it could be established that local competition was insufficient, the mere possibility of some amount of "market power" in the local exchange cannot justify placing onerous dominant carrier and separations regulations on the independent LECs. Market power gives a firm some ability to increase or lower its sales by varying its price, rather than taking as given an external market price. In markets where there are not a very large number of firms, or where products are differentiated, each firm has some market power, limited only by the types of actual and potential competition that it faces. Most companies have market power in the sense that they can vary some of their prices and face price-responsive customer demand (that is, downward-sloping demand functions). No one would seriously suggest that pricing and unbundling regulations should be applied to all such companies. Given the alternatives available and the unbundling and resale obligations, market power in the local exchange (if any) will not be significant enough to justify creating new forms of regulation that asymmetrically impact incumbents and entrants.

The concern with monopoly leveraging has no basis. If there is no monopoly position to begin with, then there can be no monopoly leveraging. Moreover, the leverage scenario is inconsistent with incentives that have been created by competition in the local exchange. Even assuming that a monopoly position exists, there remains the question of whether firms have an economic incentive to engage in monopoly leveraging. Under general conditions, firms do not have an incentive to engage in "leveraging" market power whether through vertical foreclosure or tying products.

The long-established view in economics on tie-in sales as a form of monopoly leveraging is that firms do not have an incentive to use tying arrangements to extend or leverage monopoly power from one market to another. Economic analysis has established that for a firm selling complementary goods in fixed proportion, with a monopoly in the tying good and a competitive market in the tied good, monopoly profits cannot be increased beyond those already available in selling the tying good. Creating a second monopoly in the tied good will not increase profits, since earnings are constrained by competitive alternatives in the market for the tied good.⁴⁷

The key point is that with complementary products used in fixed proportions, the monopolist can actually derive *greater* profits when its rival is in the market than when it is not because it can benefit through sales of its monopolized product from the additional surplus that its rival's presence generates (due to product differentiation). (Id., at 850, emphasis in original.)

Thus, when Whinston assumes that the tying good is an essential facility, and there are two firms in the tied good market, he finds that it is not profitable for firm 1 to drive firm 2 out of business in the tied good market, consistent with the conventional result that monopoly leveraging is not possible. To place this result in the context of telecommunications, whether monopolist or not, the LEC's sales of local exchange services could benefit from increased demand for the services that are complementary to those offered by its competitors.

The basic argument that a monopoly cannot increase its profits by creating a second monopoly in a complementary good when the goods are sold in fixed proportion continues to hold. What critics of the argument have done is create highly stylized conditions to show that starting from a non-monopoly position, in the tying and tied-goods markets, profits can be increased by forcing rivals out until a monopoly position is obtained. For example, when Whinston assumes that there is monopoly in the tying good and there is a single rival in the tied-goods market, and that rival produces an inferior good, he finds that the firm offering bundled service could drive the producer of the inferior product out of business. This result is not applicable to telecommunications. It only would apply if one believed that (1) the LEC faced no facilities-based competitors for unbundled network services, (2) the LEC faced only one competitor in the market for resale services, local toll, or long distance, and (3) the sole competitor produced an inferior product. These conditions do not hold for local telecommunications markets.

This classic result is confirmed and extended in an article by Michael Whinston on the theoretical basis for monopoly leveraging. See Michael Whinston, "Tying, Foreclosure, and Exclusion," 80 American Economic Review (March 1990) at 837-859. Whinston shows that the monopolist does not have an incentive to leverage even with differentiated products in the tiedgoods market, with economies of scale in production, and with oligopolistic, rather than a competitive, market structure in the tied-goods market. As he observes:

The leverage argument is incorrect whether or not any limits on the access charges exist. The LEC can capture no more monopoly rents on direct sales of interexchange service than it can through increases in the access charges. Suppose the LEC increases its access charges by a dollar. This increases its revenues from providing access. Suppose that the LEC also supplies interexchange service. Raising the access charges by a dollar will allow at most a corresponding increase of one dollar in the price of the interexchange service, otherwise, if the increase were any higher, customers would still continue to use the service of the competing interexchange carrier. Therefore, the LEC is indifferent as to whether it earns the extra dollar on access charges or on the calls to its interexchange service. Monopoly pricing of access captures all of the available monopoly rents. Again, when regulation places a ceiling on access charges, the LEC can not expect to raise interexchange prices any further than the increase in the access charge. This last point bears emphasis, since it also invalidates the argument that regulation motivates discriminatory access charges.

2. Regulation and Competition Prevent Cost Shifting from Long Distance to the Local Exchange

The argument that a rate-of-return regulated firm with market power has an incentive to lever this power from one market to another fails to apply to the LECs. Absent regulatory failure, supplying both long distance and local service does not increase the firm's regulated capital base. If the firm invests in facilities for the provision of long distance service, the regulated rate base is unaffected. Regulators will not allow the costs of providing the competitive service to be included in the regulated rate base. The regulated-firm leverage scenario is also inconsistent with incentives that have been created by competition in the local exchange. Competition in the local exchange prevents the LEC from pricing access based on misallocated costs since any resulting

price increases would place it at a competitive disadvantage. With incentive regulation, such as price caps, the scenario also fails to apply since the firm's earnings are not determined by rate base measures and regulatory cost allocation.

Moreover, LECs have little incentive or opportunity to raise rivals' costs through quality degradation or other similar actions. The claim that the LECs will have either the incentive or opportunity to "degrade quality" is inconsistent with regulation, market developments and technological change that have occurred in the last decade in the telecommunications industry. Both state and federal regulation prohibit discriminatory access to the local exchange. A pattern of quality degradation would be easily detected and prevented. Customers and resellers of local exchange service would observe and detect the effects of discriminatory access and pressure any company that would attempt such behavior. Among the most significant achievements in the telecommunications industry are establishment of standards organizations and the development of technological standards. National and international standards organizations provide independent monitoring of transmission standards. The International Telecommunications Union - Telecommunications Standardization Sector (ITU-T) and the International Organization for Standardization (ISO) with U.S. representation by the American National Standards Institute (ANSI) independently monitor interconnection standards.

Moreover, selective discriminatory access is impossible when facilities are shared between exchange and access (as is increasingly the case) and dedicated access can increasingly be monitored with new technology.⁴⁹ Technological change often allows for interexchange carriers

⁴⁸ See Affidavit of Casimir S. Skrzypczak at ¶¶ 10-21, attached to Motion of Bell Atlantic, Corporation, BellSouth Corporation, NYNEX Corporation, and Southwestern Bell Corporation to Vacate the Decree, United States v. Western Elec. Co., No. 82-0192 (D.D.C. July 6, 1994).

⁴⁹ *Id*.

to reroute service if problems develop. Lower quality service is also constrained by competition in the access market. The lower the quality of the access service provided to competitors, the greater will be the diversion of business to competing providers of access. The alleged quality degradation problem is inconsistent with the organization of today's telecommunications industry.

The LEC does not have an economic incentive to degrade quality of service to the interexchange carriers. The sale of interexchange services is in some ways similar to a grocery store that sells national brands and a generic "house brand" of long distance service. If incentive to exclude competing brands existed, no store would ever sell a national brand, since it can alter its markups to always give an advantage to the house brand. Yet, grocery stores typically carry nationally advertised brands alongside its own generic brands. This is because consumers demand variety and the store earns returns from the sales of both types of brands. In telecommunications, the incentives for the LEC to offer both a house brand and many competing brands are the same, even without the regulatory compulsion to do so.

In the telecommunications context, it should be apparent that the LEC earns returns from providing access to its local exchange network, even if that access is provided to competing IXCs. Furthermore, customers demand access to the IXCs in response to their brand-name service offerings. Because the LEC obtains access revenue on these IXC calls, it would have little incentive to impose cost penalties or degrade the quality of connections simply to "favor" its own services.

Thus, LECs will sell access because it is profitable for them to do so, even without equal access regulations. As long as access charges are compensatory, that is, they cover the LECs economic costs, the LECs will have an economic incentive to promote the sale of access services. In addition, there is competition for the provision of access. Customers will choose alternative

access if they wish to receive the services of IXCs and the LEC were to impose cost penalties or quality degradation. This applies both to originating and the terminating access. If customers were not satisfied with either originating or terminating access, they would seek alternative access providers.

3. The Erosion of the Local Exchange Monopoly Eliminates Leverage and Self-Dealing

The argument that a LEC will use its monopoly in the local exchange to sell long-distance services to its own customers in a manner that denies access to other firms is incorrect and inconsistent with current industry conditions. The view that, by virtue of natural monopoly technology, an LEC has a monopoly over the local exchange is no longer correct, as I have already explained. Moreover, the assertion that the LEC has a local monopoly as a result of barriers to entry due to sunk costs or regulation is also no longer correct, as I have already noted. Finally, the presence of competition and the potential for substantial additional entry into the local exchange invalidates the notion of monopoly in the local loop.

In the case of interexchange services, customers clearly have a choice of interexchange carriers as a result of the FCC's equal-access rules. Moreover, customers have alternative means of accessing interexchange carriers, such as through CAPs, which supply access on fiber-optic networks. Therefore, many customers already can access long-distance providers without going through the local exchange. These alternatives will continue to expand as the interexchange carriers themselves vertically integrate into the provision of local access—AT&T through its acquisition of McCaw's cellular network, and MCI through its own construction of metropolitan fiber rings. Furthermore, under equal-access regulations the interexchange services of the LECs would compete on an equal footing in terms of access to the local loop with the interexchange

carriers that currently reach customers through the local exchange (including MCI, Sprint, and AT&T).

Raising rivals' costs refers to the actions of a firm to raise the costs of its competitors, thereby gaining a competitive advantage, by increasing the price of an essential facility, or otherwise rationing access to the input by competitors through a demand-side or supply-side bottleneck. The notion that LECs will use their facilities to raise rivals' costs is another version of the view that the local exchange is an essential-facility argument. The argument that the LECs will be able to use their control over the local exchange is inconsistent with the regulatory and industry developments in the local exchange that I have already discussed. These developments imply that the local exchange is no longer an essential facility just as they imply that the LECs no longer qualify as natural monopolists or benefit from barriers to entry.

Therefore, the intended safeguards against leveraging and raising rivals' costs provided by dominant carrier regulations and separations requirements are not necessary.

D. The LECs Do Not Have Any Incentive to Engage in Cross Subsidization of Interexchange Service

The independent LECs do not have an economic incentive to engage in cross subsidization of interexchange telecommunications. Competition prevents pricing for purposes of cross subsidization. Moreover, the LECs have no economic incentive to engage in predatory cross subsidization.

Cross-subsidization occurs when a company supplying more than one product or service uses the revenues from product A to recover a portion of the additional costs of producing

product B. This practice can create economic inefficiencies since the customers of product A would be made better off if the products were produced and priced separately, even though this would forego economies from joint production. Moreover, the customers of product B are given incorrect price signals about the incremental costs of producing their product.

There are formal tests for cross-subsidization. A regulated firm's rate structure can be said to be free of cross-subsidies if and only if the prices satisfy the *stand-alone cost test*. 50 The regulated rate structure refers to a break-even rate structure. Stand-alone cost refers to the firm's long-run total cost of each service operated separately. The stand-alone cost test requires that the revenues generated from either of two services not exceed the stand-alone cost of providing that service. If the revenues from one service do exceed its stand-alone cost, then that service is providing a cross-subsidy to the other service. Clearly, the customers of the service that is providing the cross-subsidy would be better off if that service could be obtained independently of the other service.

A regulated firm's rate structure is free of cross-subsidies if and only if the prices satisfy the *incremental cost test*, which is equivalent to the stand-alone cost test for a regulated rate structure.⁵² Applying the incremental cost test, revenues generated by each service cover the incre-

The stand-alone cost test is a widely applied criterion. See Baumol, Panzar & Willig, supra note 15, at 352-353.

⁵¹ The definition of the stand-alone cost test is given in terms of two services. In the case of more than two services, the test requires that no group of services subsidizes any other group of services.

⁵² The incremental cost test is a widely applied criterion that has been known for over a century. For further discussion and a formal definition, see William J. Baumol, Superfairness: Applications and Theory 113-20 (MIT Press 1986).

mental cost of providing that service.⁵³ The rationale for the incremental cost test is the requirement that each service must generate revenues that at least cover the additional cost of producing that service. If not, the other service is providing a cross-subsidy, and the customers of the other service would be better off receiving their service independently, at its stand-alone cost.

If the firm's rates are not necessarily break-even regulated rates but instead generate revenues that are greater than or equal to costs, then the incremental cost test should be applied to determine cross subsidization. If the firm operates in both regulated and unregulated markets, the revenues in the unregulated market should cover the firm's incremental costs of serving the unregulated market. This guarantees that serving the unregulated market increases or does not reduce the firm's profit.

The LECs do not have an incentive to subsidize their entry into interexchange services, or into any other service for that matter. If it were to do so, the LEC would earn incremental revenues that are less than the incremental cost of providing other services, thus incurring an economic loss on additional lines of business. Such an action would be inconsistent with profit maximization and would not be undertaken by an LEC because it would be inconsistent with the interests of its shareholders.

This is not to say that other lines of business would not run the normal initial losses that occur as a new business is established. It is normal for investors to incur losses in the initial phases of establishing a new line of business. Moreover, a line of business may incur losses as

⁵³ The incremental cost test is defined here for only two services. In the case of more than two services, the revenues generated by each group of services must cover the incremental cost of providing that group of services.

a consequence of the normal market risks faced by any business. It is, however, inconsistent with business objectives and economic analysis to expect that an LEC would enter a market with the intention of incurring a loss, even if that loss were subsidized from earnings in another part of its business. The interests of the LEC's owners would be to invest those earnings in a venture that they expected to be profitable. Therefore, the notion that an LEC would obtain a competitive advantage through cross-subsidies is incorrect and at variance with the profit-making objectives of shareholder-owned companies. A business will not cross subsidize a new business venture that it expects to be unprofitable.

Another aspect of the cross-subsidy argument is that an LEC would use cross subsidies temporarily to obtain a competitive advantage over its rivals in other lines of business, with the objective of eliminating competitors. This view implies that the LEC would engage in behavior resembling "predatory pricing." Predatory pricing is said to exist if firms incur a loss with the intention of eliminating rivals and the objective of later raising prices to recoup earnings after the rivals have exited from the market. This argument is discredited since economists—and the Supreme Court—generally agree that predatory pricing is unlikely to succeed: because the incumbent firms must incur losses with little guarantee of successful recoupment, rivals can also incur losses in anticipation of future profits, and new entrants will appear if prices are subsequently raised. Moreover, it is difficult in practice to distinguish low competitive prices from "predatory prices" and to distinguish low earnings from "predatory losses." Subsequently prices are subsequently prices and to distinguish low earnings from "predatory losses."

⁵⁴ See, e.g. Spulber, supra note 16, at 475-76.

⁵⁵ Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 113 S. Ct. 2578 (1993); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986).

⁵⁶ See Robert H. Bork, *The Antitrust Paradox* (Basic Books, 1978) at 144-155. *See* also Janusz A. Ordover and Garth Saloner, Predation, Monopolization and Antitrust, in Richard Scmalensee and R.D. Willig, *Handbook of Industrial Organization*, volume I, Chapter 9, 537 for

The scenario of cross subsidization and predatory pricing grows increasingly implausible when one considers that the market that the LEC would be most likely to enter may have multiple incumbent suppliers with substantial capacity. This description fits both the interexchange and telecommunications equipment markets. With respect to the interexchange market in particular, predatory pricing would be futile for an LEC to undertake because AT&T, MCI, and Sprint all have substantial capacity, and market supply is sufficiently elastic as already noted.

Competition in the local exchange, whether from resellers or facilities-based carriers, precludes using those revenues as a source of subsidies because as is well known, entrants will target market segments that provide cross subsidies. Even if the cross subsidies are derived from service even some segments of the local exchange, this will create and incentive for existing competitors and new entrants to "cream skim" exactly those customers. The result would be decreased revenues for the LEC. Thus, the LEC does not have an incentive to gather subsidies from local exchange customers.

I agree with the FCC's statement in its NPRM that "in principle, the size of a LEC will not affect its incentives to engage in cross subsidization between its monopoly services and its competitive services." Such incentives are not present regardless of the size of the LEC. The LEC lacks economic incentives to cross subsidize since gathering cross subsidies will result in loss of business in the local exchange, and the LEC would not choose to enter interexchange services at a loss. The LEC lacks the opportunity to cross subsidize even if it somehow wished to do so since local exchange competition prevents the gathering of subsidies and interexchange

a survey of industrial organization models of predation..

⁵⁷ FCC CC Docket No. 96-149, at 77.

competition precludes predatory behavior. Therefore, the safeguards provided by dominant carrier regulations and separations requirements are equally unnecessary for larger independent LECs and small or rural independent carriers.

E. Conclusion

Changing conditions in local telecommunications markets should be taken into account in evaluating dominant carrier regulations and separations requirements. Technological and market changes in the local exchange indicate that the technology of local exchange telecommunications no longer can be said to have the natural monopoly property. Competition, technological change, and the regulatory requirements of the 1996 Telecommunications Act have effectively eroded or eliminated barriers to entry into local exchange markets. Therefore, the LECs have no market power to leverage. Even if one were to believe that the LECs had market power in the local exchange, they do not have an economic incentive to leverage that market power or to raise rivals' costs. Moreover, the LECs do not have any economic incentive to engage in cross subsidization of interexchange service. They do not have an incentive to obtain the cross subsidies in the local exchange because trying to do so will only lead to losses of customers to competitors. They do not have an incentive to provide subsidies to a service, because they would be incurring losses by provision of such a service. Therefore, in addition to the absence of market power in interexchange telecommunication, the LECs do not have the opportunity or the incentive to leverage any alleged market power from local exchange telecommunications into the interexchange market. Therefore, the characteristics of local exchange markets, technology and regulation do not support classifying the LECs as dominant carriers in interexchange telecommunication nor do they support continuing the separations regulations.

III. Separation and Dominant-Carrier Regulations Create Barriers to Entry into Interexchange Telecommunications

As I have shown, technological, market and regulatory conditions in local-exchange and in interexchange telecommunications do not support classifying the LECs as dominant carriers in interexchange telecommunication nor do they support continuing the separations regulations. In this section, I further find that achieving the objections of the 1996 Telecommunications Act requires dismantling the separation and dominant carrier regulations because they create barriers to entry into interexchange telecommunications.

The application of these rules is asymmetric, with competitive rigidities and cost burdens falling upon the independent LECs. As a consequence, the playing field is not level for independent LECs as compared to interexchange carriers. If rules are not applied fairly and evenly, the result is not deregulation but managed competition. Managed competition protects specific competitors not competition. The resulting market outcome will not necessarily reflect customer preferences and the relative economic efficiency of competing firms. Instead, the market outcome will be the result of regulatory choices, which need not be efficient or responsive to customer needs. Regulation should recede as competition expands. Achieving the benefits of competition and avoidance of the administrative costs of regulation further argue for reduction of regulation.

The Commission outlines the effects of declaring AT&T to be nondominant: (1) freedom from price-cap regulation; (2) allowed to file tariffs on one day's notice and no longer required to report or file carrier-to-carrier contracts; (3) automatically authorized to extend service to any domestic point, and to construct, acquire, or operate any transmission lines (subject to FCC approval or radio frequencies) and to discontinues or reduce service; (4) does not have to submit

cost-support data for above-cap or out-of-band filings; and (5) released from other annual reporting requirements including annual financial report, depreciation report, annual rate-of-return report, and access minutes report.

These changes substantially reduce the regulatory constraints and administrative costs of regulation for AT&T. To impose such constraints and costs on other carriers would create a barrier to entry into interexchange telecommunications, because any costs borne by entrants but not incumbents constitute a barrier to entry. Therefore, imposing such costs asymmetrically would bias market outcomes in favor of those companies that were free of the costs.

Even if such regulatory constraints and administrative costs were to be evenly applied to all interexchange carriers, they would have a greater impact on smaller independent LEC carriers. It is unlikely that the costs of compliance increase proportionately with the size of the firm. The small independent LECs thus would experience a greater proportional increase in administrative costs than the large interexchange carriers. As a result, the barriers to entry into interexchange telecommunications could be insurmountable for many firms. This would only result in reduced competition in interexchange markets.

A. Separation and Dominant-Carrier Regulations are Asymmetrically Applied

Under the rules in the Competitive Carrier Fifth Report and Order, independent LEC provision
of interstate, domestic, interexchange services is subject to non-dominant treatment if the affiliate:

(1) maintains separate books of account; (2) does not jointly own transmission or switching
facilities with the exchange telephone company; and (3) obtains any exchange telephone company

services at tariffed rates and conditions.⁵⁸ The first two requirements increase the total costs of a company providing both local exchange and interexchange services relative to the manner in which the firm would otherwise organize its accounting and facilities ownership. This is because such regulatory constraints, if they have any force, must result in higher costs in comparison with the choices that an unconstrained firm would make. In addition, the tariff restrictions and reporting associated with the third requirement presumably entail administrative costs for firms.

Interexchange Carriers do not face separation and dominant carrier regulations as they enter the local exchange, but local exchange carriers face separations regulations when they enter interexchange telecommunications. The 1996 Telecommunications Act expects facilities-based competition to occur in the local exchange. Some of this competition will come from facilities created by interexchange carriers. These carriers will continue to be viewed as interexchange carriers with local exchange facilities. They will be treated differently from local exchange carriers that have local exchange facilities but also provide interexchange services. Therefore, the net result is an accident of history. Why should a firm that wishes to operate in two markets face different regulatory restrictions and administrative costs depending upon which market it originally serves? Put differently two identical firms, each serving both interexchange and local exchange markets would be treated differently by regulators depending on the history of the firm. Because these regulations entail transactions and administrative costs for the LECs, they are placed at a competitive disadvantage relative to the interexchange carriers and other new entrants.

⁵⁸ See discussion in NOPR CC Docket No. 96-149.

B. Separation and Dominant-Carrier Regulations Act as a Barrier to Entry

Because these regulations are asymmetrically applied, they place the LECs at a competitive disadvantage if they try to enter interexchange markets and thus constitute a barrier to entry into long distance for the independent LECs. The cost of maintaining separate books of account will fall heavily on smaller independent LECs deny them the economies of scope that would result from maintaining combined accounts. The separate ownership of transmission or switching facilities with the exchange telephone company will further reduce economies of scope that could be achieved by operating facilities jointly. Finally, applying regulatory conditions to the purchase of local exchange services that are not present for interexchange carriers will create costs for local exchange carriers that are not present for interexchange carriers.

A barrier to entry is a cost borne by an entrant but not an incumbent. The result of these asymmetric regulations will be to create regulatory barriers to entry into interexchange telecommunications. This has the potential to reduce competition in interexchange telecommunications.

Moreover, since interexchange carriers can operate as local exchange carriers through resale of LEC services, the use of unbundled LEC network elements, and construction of competing facilities, the interexchange carriers can build companies that take advantage of economies of scope arising from the joint provision of local exchange service and interexchange service. Moreover, the joint provision of local exchange service and interexchange service is attractive to customers seeking the convenience of one-stop shopping. Thus, there are potential cost and sales advantages to operating in both types of markets. If LECs face regulatory entry barriers into interexchange telecommunications, they are ultimately placed at a competitive

disadvantage in the local exchange as well. The net effect is to impede rather than enhance competition.

The situation would be exacerbated still further if local exchange carriers were to be classified as dominant. For example, AT&T and other interexchange carriers are allowed to file tariffs on one day's notice and no longer required to report or file carrier-to-carrier contracts, while local exchange carriers entering long distance would face such requirements, placing them at a competitive disadvantage. The LECs would not be able to respond as quickly as competitors to changes in market conditions. Furthermore, AT&T and other carriers are automatically authorized to extend service to any domestic point, and to construct, acquire, or operate any transmission lines while LEC competitors would have to file applications to engage in these competitive activities, which could effectively bar their entry in certain market segments. AT&T and other interexchange carriers can discontinue or reduce any interexchange service, but a LEC could not do so once it had begun to provide a service, so that LECs would be discouraged from initiating service in parts of the market. AT&T and other carriers do not have to submit costsupport data for above-cap or out-of-band filings; or comply with a host of other costly annual reporting requirements, that would be imposed on the LECs. The only result of the dominant carrier classification is to protect AT&T and other interexchange carriers from competition, thus reducing customer choice and reducing the expected benefits of deregulation.

C. Separation and Dominant-Carrier Regulations Are Not Impartial

Telecommunications rules should be impartial. However, as deregulation of telecommunications markets takes place, continuing the separations requirements, or imposing new dominant-carrier

restrictions on the LECs, would be far from even-handed. These regulations would be form of industrial policy because they "pick winners" in the telecommunications marketplace. Independent LECs would forego economies of scope and one-stop-shopping convenience. They would have higher administrative costs in comparison with interexchange carriers and new entrants. Thus, many LECs would be deterred from entry into interexchange telecommunications. This means that the regulations would serve to determine what types of carriers can offer specific services, rather than letting the competitive market determine what types of companies are best suited to provide customer services in telecommunications. Such a biased outcome would not be expected to yield the economic benefits of competition.

D. Regulation Should Recede as Competition Expands

Deregulation can achieve additional efficiency gains by reducing the administrative and transaction costs associated with regulation, which are ultimately borne by residential and business customers. In addition, deregulation can achieve benefits by eliminating distortions in the decision making of telecommunications customers and firms, leading to greater efficiency in entry and investment decisions, increased product variety and responsiveness to customer preferences, elimination of pricing distortions, increased innovation and greater opportunities for customer choice. By avoiding imposition of dominant carriers restrictions and by eliminating the separations requirements, the Commission can achieve these important efficiency gains.

Deregulation yields benefits by reducing or eliminating the administrative costs associated with traditional rate of return regulation, and as well as those associated with incentive regulation.

This means the elimination of rate hearings which entails costs for regulatory commissions as

well as for companies and customer intervenors. Achieving these benefits requires the Commission to reduce its oversight role in competitive segments of the telecommunications marketplace, rather than creating complex rules requiring increased intervention in market activities.

Deregulation can enhance product variety and expand the choices available to customers. Under the AT&T monopoly before the breakup, customers could purchase only basic types of telephones. The proliferation of customer premises equipment since the breakup indicates how the market responds to customer requirements by offering a variety of choices and investing in research and development to widen those choices still further.

Deregulation promotes innovation. With many competitors entering the market, there will be myriad competing solutions to telecommunications problems. Solutions may involve not only new technologies but widely differing mixtures of software, equipment, network connections, and transmission media. A competitive market responds to changing customer preferences, tailoring capacity, reliability and service offerings to the disparate needs of individual market segments.

For the market to innovate in such a responsive manner, and for customers to have access to a variety of telecommunications options, the Commission must have the courage and forbearance to allow multiple telecommunications solutions to emerge. It must remove regulations and their underlying definitions of products, services and transmission modes that draw artificial distinctions between types of companies. Telecommunications competitors should neither be favored nor handicapped, whether they are interexchange carriers, local exchange carriers, or new forms of service providers.

E. Conclusion

Based on my economic analysis, the independent LECs lack market power in local exchange telecommunications and interexchange telecommunications: 1) The independent LECs do not have sufficient market power to raise the price in interexchange telecommunications above competitive levels; and (2) The independent LECs do not have sufficient market power in the local exchange to raise rivals' costs in interexchange telecommunications. In section I, I examined the independent LECs market shares in interexchange telecommunications in comparison with those of the interexchange carriers, the supply and demand elasticities in interexchange telecommunications, and the cost structure, size and resources of the independent LECs. These considerations establish their lack of market power over price in interexchange telecommunications.

In Section II, I examined the technology and entry conditions in local exchange telecommunications, and concerns over leverage and cross-subsidization. The analysis shows that changes in technology, market conditions, and regulations should eliminate concerns over market power of the LECs. Thus, the LECs cannot leverage market power that they do not have, nor can they draw on local exchange revenues to subsidize interexchange service since they lack market power in the local exchange.

Even if one were to suppose for purposes of argument that the independent LECs had market power in the local exchange, I have shown that they do not have either the opportunity nor the economic incentive to engage in leveraging or raising rivals' costs. Moreover, the LECs do not have either the opportunity nor the economic incentive to engage in cross-subsidization of interexchange telecommunications.

Based on my economic analysis, I conclude that the independent LECs should not be classified as dominant carriers in offering interstate, domestic, interexchange telecommunications services (hereafter interexchange services). I further conclude that the separate affiliate safeguards should be eliminated. The protections afforded by the separate affiliate safeguards are rendered unnecessary by competition in interexchange services and in the local exchange. Not only are they unnecessary, but the protections themselves serve as competition-reducing entry barriers into interexchange telecommunications because they are asymmetrically applied and because they entail administrative and transaction costs. The importance of one-stop-shopping in telecommunications suggests that the separate affiliate safeguards also reduce competition in the local exchange.